

## CLAIMS

1. A method for producing a  $\beta$ -1,4-mannobiose-containing composition wherein a mannan degrading enzyme is functioned to a mannan-containing natural material to produce at least 10% by weight of  $\beta$ -1,4-mannobiose based on the mannan before the degradation.
2. The method for producing a  $\beta$ -1,4-mannobiose-containing composition wherein a mannan degrading enzyme is functioned to mannan extracted from a mannan-containing natural material to produce at least 10% by weight of  $\beta$ -1,4-mannobiose based on the mannan before the degradation.
3. The method for producing a  $\beta$ -1,4-mannobiose-containing composition according to claim 1 or 2 wherein a mannan degrading enzyme is functioned to 100 parts by weight of mannan with supplementing 50-10000 parts by weight of water.
4. The method for producing a  $\beta$ -1,4-mannobiose-containing composition according to any one of claims 1 to 3 wherein the temperature at which the mannan degrading enzyme is functioned ranges from 40° to 55° C.
5. The method for producing a  $\beta$ -1,4-mannobiose-containing composition according to any one of claims 1 to 4 wherein 20-80% by weight of  $\beta$ -1,4-mannobiose based on the mannan before the degradation is produced.
6. The method for producing a  $\beta$ -1,4-mannobiose-containing

composition according to any one of claims 1 to 5 wherein the mannan-containing natural material is palm kernel meal and/or copra meal.

7. A feed additive containing the  $\beta$ -1,4-mannobiose-containing composition prepared by the method for producing according to any one of claims 1 to 6.

8. A feed blended with the  $\beta$ -1,4-mannobiose-containing composition prepared by the method for producing according to any one of claims 1 to 7, which can inhibit colonization of salmonella in intestine of livestock or poultry.

9. The feed according to claim 8, in which 0.001-1% by weight of  $\beta$ -1,4-mannobiose is contained.

10. The  $\beta$ -1,4-mannobiose-containing composition prepared through the function of a mannan degrading enzyme to a mannan-containing natural material, which contains at least 3% by weight of  $\beta$ -1,4-mannobiose in terms of dry matter.

11. The  $\beta$ -1,4-mannobiose-containing composition prepared through the function of a mannan degrading enzyme to mannan extracted from a mannan-containing natural material, which contains at least 10% by weight of  $\beta$ -1,4-mannobiose in terms of dry matter.

12. The  $\beta$ -1,4-mannobiose-containing composition according to claim 10 or 11 wherein the mannan-containing natural material is palm kernel meal and/or copra meal.

13. A feed additive which contains the  $\beta$ -1,4-mannobiose-containing composition according to any one of claims 10 to 12.

14. A feed blended with the  $\beta$ -1,4-mannobiose-containing composition according to any one of claims 10 to 12, which can inhibit colonization of salmonella in intestine of livestock or poultry.

15. The feed according to claim 14 which contains 0.001-1% by weight of  $\beta$ -1,4-mannobiose.